AMENDMENTS TO THE CLAIMS

1. (Cancelled)
2. (Cancelled)
3. (Cancelled)

4. (Currently amended) A computer-implemented method for real-time performance monitoring for a parallel processing engine, comprising:

executing a plurality of processes in parallel to process data;

displaying in real time graphical representations of the processes and the flow of the data through the processes as the data is processed by the processes.

5. (Currently amended) Computer-readable medium storing instructions, wherein the instructions, when executed, produce following actions:

execute a plurality of processes in parallel to process data;

display in real time graphical representations of the processes and the flow of the data through the processes as the data is processed by the processes.

6. (New) A real-time computer performance monitoring system for a parallel processing engine connected to a network, comprising:

a computer connected to the network and executing a performance monitoring program, the computer also processing commands for controlling the parallel processing engine;

the parallel processing engine automatically executing one or more data flow graphs representing modular programming objects of the parallel processing engine;

the performance monitoring program receiving real-time performance information about a computational state of said one or more data flow graphs and of components of said one or more data flow graphs, and

a display device for providing a real-time graphic visualization of said one or more data flow graphs as a graphic network including said modular programming objects.

7. (New) The performance monitoring system of claim 6, wherein parallel execution of one of said data flow graphs produces a score and associated data structures, wherein the data structures are used to store information about the computational state of said one data flow graph to be used for its visualization.